

SUBSTITUTE ABSTRACT

An expression cassette, operable in a recombinant host is disclosed. The expression cassette includes at least two heterologous DNAs encoding functional enzymes for catalyzing at least one oxidation step in the biological pathway for conversion of cholesterol into hydrocortisone. These oxidation steps include: the conversion of cholesterol to pregnenolone, the conversion of pregnenolone to progesterone, the conversion of progesterone to 17 α -hydroxyprogesterone, the conversion of 17 α -hydroxyprogesterone to cortexolone, and the conversion of cortexolone to hydrocortisone.